



# HEALTHY *Looking at the World Differently* ECOSYSTEMS

Traditionally, we have looked at environmental problems based on where they occur, such as in the water, air or soil. Or we focused on the nature of the problem, such as hazardous waste, pesticides or asbestos. As a result we often missed the deeper perspective of how all these elements interrelated in the real world. We were not looking at the whole picture at one time. EPA now looks at the challenges facing our fragile environment from an ecosystem approach. We are now finding big picture solutions to ecosystem level problems.

Our goal is to protect and restore the remarkable ecosystems in the Pacific Northwest and Alaska by addressing problems in specific geographic areas using an integrated approach. It is a complex way of doing business, requiring coordination with many different people. It is also time consuming. However, since we began focusing on environmental interrelationships over four years ago, significant progress has been made in addressing environmental problems from a holistic ecosystem perspective.

## ***Working Together in Agriculture:***

Agricultural practices have been linked to a number of environmental problems: nitrate and pesticide contamination of ground and surface water, air quality impairment caused by “agricultural dust”, loss of natural shrub-steppe habitat and loss of salmon habitat. The agriculture industry is concerned about these environmental challenges and others such as loss of pesticides needed to protect crops, declining market

prices for traditional crops and increasing costs of doing business.

The Columbia Plateau Agricultural Initiative is a comprehensive effort promoting environmental protection with wise agricultural practices, resulting in a sustainable environment and a sustainable industry. In early 1997 EPA, various state, federal and local agencies, local Conservation Districts, Washington State University Cooperative Extension, industry organizations and individual farmers began working together. The intent was to support community-based and individual efforts in five eastern Washington counties that promote farming and ranching practices which protect both the environment and the pocketbook.

EPA provided \$400,000 in funding for projects that promote nitrate monitoring in groundwater, develop new farming practices and provide education and training. In addition, the Columbia Plateau Agriculture Initiative tapped into funds from other programs such as environmental education grants, safe drinking water grants and air quality protection and food safety funding sources.

The “Wilke Farm Project” is a national model of how to develop and demonstrate to farmers, that environmentally friendly crops and cropping methods can result in a sustainable agriculture industry. The Wilke project and the other efforts of the Columbia Plateau project look at agriculture and the natural ecosystems holistically, not in





the context of independent environmental elements. They develop economically sustainable crops and cropping methods, while minimizing pesticide and fertilizer use. They also aim to prevent sediment run-off to surface water and wind erosion that causes agriculture dust.

#### *Innovation and Industry*

When several species of Pacific salmon were listed as endangered in 1999, private land owners faced a new challenge to maintain productive crops while protecting aquatic habitat. The EPA, National Marine Fisheries Service and the State of Washington worked with Simpson Timber Company to develop an integrated plan for managing their timber lands. The plan addresses the conservation needs of fish and wildlife, maintains water quality, basin hydrology and channel integrity. Simpson was able to integrate healthy environmental management into a profitable commercial forest operation. By making strong commitments to protect the ecological integrity of their lands and waters Simpson sought flexibility in how the *Endangered Species Act* and *Clean*

*Water Act* would be enforced in the watershed.

Simpson Timber Company's voluntary effort to manage these lands from an ecosystem approach is an example of how industry and government are working together to view the environment differently. This area of the Chehalis River Basin, about 220,000 contiguous acres, is being managed beyond the measures that Simpson would otherwise be subject to. Simpson Timber Company, the EPA and National Marine Fisheries Service developed a mutually acceptable plan, ensuring the protection of the aquatic dependent resources of the area and the ability to maintain a commercial forestry operation.

#### *Forest and Fish*

Salmon are often referred to as an "icon" in the Pacific Northwest and Alaska. They represent thriving streams, healthy forests and a connection to our historical roots of living off the land. Unfortunately, many Pacific salmon runs are listed as threatened or endangered under the *Endangered Species Act*. The reasons for the critical state of many salmon runs generally fall under the

category of habitat destruction or modification, whether it be from hydropower dams, agricultural practices, urbanization, or forest practices.

One large scale attempt at habitat improvement is the Forest and Fish agreement that covers nearly eight million acres of private forest land in the State of Washington. While forest practices are regulated, the continuing decline of salmon triggered a second look at the adequacy of those regulations. They ultimately proved to be inadequate.

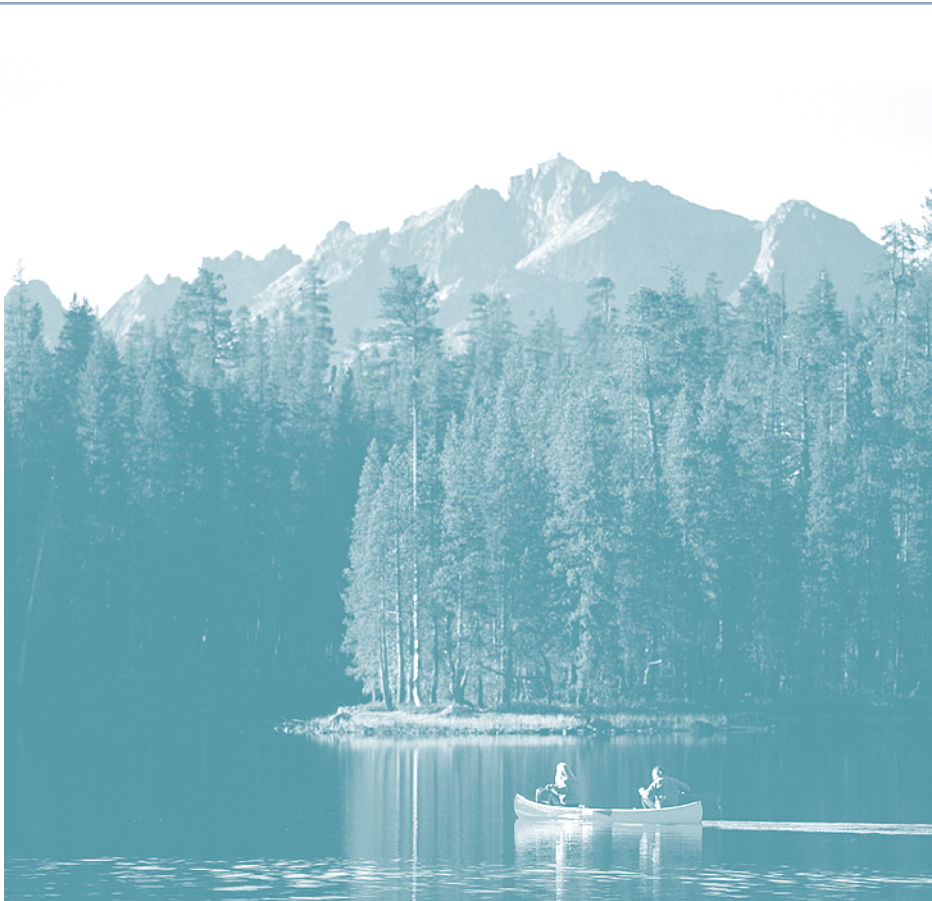
The EPA joined other federal and state agencies, counties, tribes, and forest landowners to re-evaluate the regulations. The goal was to meet both the *Endangered Species Act* and the *Clean Water Act*, while recovering harvestable levels of salmon and timber. The parties met the goals through a long and difficult, but ultimately successful negotiation. The new agreement provides:

- 180 feet of stream side vegetative buffers
- protection for small streams
- additional restrictions on logging steep slopes

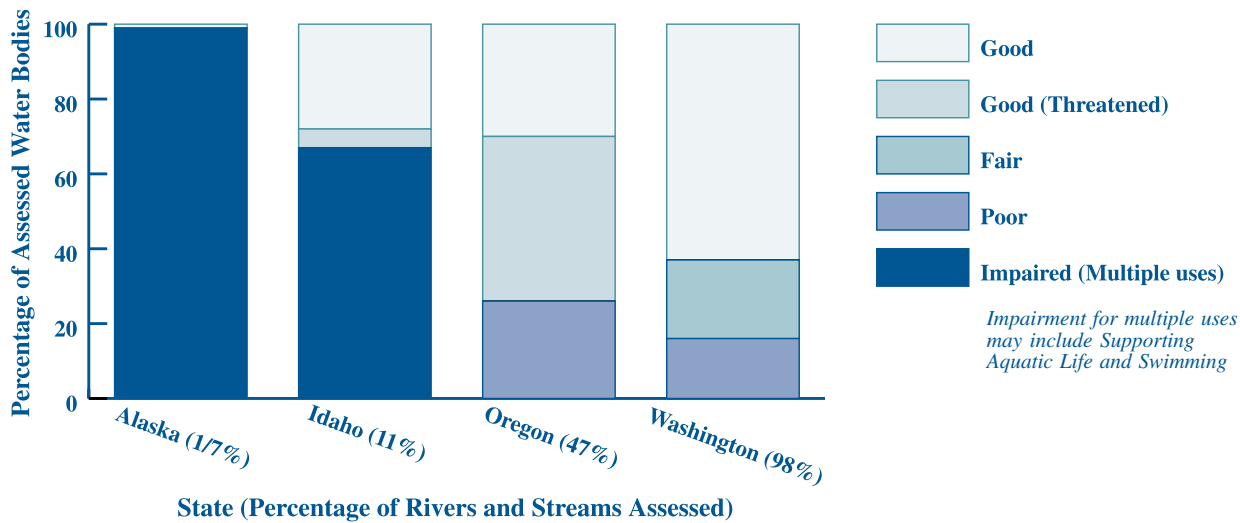
- inventories, prioritization and repair of forest roads
- increased enforcement
- reclassification of some streams
- funding tribal involvement
- and, continuing evaluations on the success of the new rules.

Forest practices in the State of Washington are now among the most stringent in the nation, and are the result of stakeholders negotiating in good faith to protect the ecosystem.

There will always be challenges when we attempt to balance environmental protection with economic activities and the needs of communities. Effective solutions to environmental problems require the cooperation and involvement of many groups who have a wide range of interests. We must work together to examine these challenges from an ecosystem approach. Looking not only at legal and scientific efforts to protect the environment, but the social and economic needs of people as well.



**River and Stream Quality Assessment - Support of Aquatic Life**  
 From the 1998 305b Report to Congress



For more details visit - <http://www.epa.gov/305b/98report/>